City of Albuquerque Environmental Health Department Director - 768-2600

Albuquerque/Bernalillo County Air Quality Control Board 768-2600

Air Quality Division Manager 768-1972

Important Phone Numbers

Air Quality Index & Pollen 768-4731 opt 1 or 766-7664 Burn/No Burn 768-BURN (2876)

Ambient Air Monitoring - 768-1969

- ♦ National Ambient Air Quality Standards
- ♦AQI & Seasonal Pollen

Compliance

- & Field Enforcement 768-1972
- ♦ Facility Inspection
- ♦Topsoil Disturbance
- ♦ Compliance Assurance
- ♦ Asbestos Abatement
- **�**Open Burn Permits
- **♦**Woodburning Exemptions

Education, Outreach & Technical Assistance - 768-1970

- ♦Pollution Prevention
- **♦**Emergency Preparedness
- ♦Community Outreach
- ♦Small Business Assistance
- ♦ The Air Shed Newsletter

Permitting & Emission Inventories - 768-1972

- ♦ Application Review & Permit Issuance
- ♦ Permitting Policy / Development
- ♦ Ambient Air Dispersion Modeling
- ♦Emission and Pollutant Inventories
- ♦ Aerometric Information Retrieval System [AIRS]

Control Strategies - 768-2600

- ♦ Development of Air Quality Regulations
- ♦ Preparation of State Implementation Plan elements
- Air Ouality Control Board
- ♦ Review Federal environmental assessments

Public Health Initiatives - 767-5621

- ♦ Air Quality Complaints
- ♦Indoor Air

Quality Assurance - 768-1963

- ♦EPA Reporting
- ♦ Review & Validation of Data
- ♦ Air Quality Trends Analysis

Vehicle Pollution Management - 764-1110

Vehicle Emissions Testing Oxy-Fuels Smoking Vehicles

Message From The Mayor

As spring comes to New Mexico more than just the weather will change. Many major highway reconstruction projects are under way statewide, most notably for Albuquerque residents, the Coors Blvd./I-40 interchange. Work has already begun and on March 1, 2005 the first major ramp closures went into effect. The project is expected to be completed in the summer of 2006.

Built in the 1960's, the existing Coors/I-40 interchange was designed to handle about 60,000 vehicles per day, far fewer than the 159,000 vehicles per day it currently serves, a number that's expected to swell to 225,000 in the next twenty years. That's not news to Albuquerque's "west-siders", many of whom face the congested interchange on a daily basis. The overloaded interchange creates aggravating delays for commuters, and, more importantly, it poses risk of accidents to motorists who have to navigate through its outmoded design. It's definitely time for a change. But along with the change comes a challenge.



The I-40/Coors interchange reconstruction (some refer to it as the "Little I") is a very large project. The interchange is a major gateway to the west side and rebuilding it will have its challenges. But, just like when the Big I was rebuilt, we will get through it together and we will ultimately have a much safer, smoother-flowing inter-

section, one that will serve our community well for decades to come. In the meantime...

Please obey the posted speed limits within the construction zones. Slow down to protect the safety of the construction crews who have to work in cramped spaces and to protect one another. Be considerate. Delays will happen, but will only be worse if accidents occur. Slow, steady speeds are easier on your car, yield better gas mileage and produce less stress than frustrating jackrabbit starts and stops. Smooth flowing traffic also helps reduce vehicle air pollution. Give the other driver a break. Maybe someone will do the same for you.

While construction crews are at work, why not consider a transportation alternative? If you have access to the Internet, visit CABQ.GOV. Under the A-Z menu, click ABQ RIDE. Here you will find access to available public transit that may be right for you, such as: **RAPID RIDE** which features a modern system of environmentally friendly buses that will provide quick and easy access to major business centers, attractions, dining, shopping, hotels and special events without having to worry about parking availability, fees, gas or traffic; **JOINT USE PARK AND RIDES** which are partnerships with businesses or institutions that have volunteered some spaces in their parking lots for ABQ RIDE commuters to park their cars: and the **UPTOWN TRANSIT CENTER** which as part of the Uptown Sector Plan, calls for capturing 20% of the work trips into the Uptown Intense Core by transit, ridesharing, walking and bicycling; incentives for workers to use alternatives to the single-occupant vehicle; and creating a highly visible, convenient, safe and attractive transit, bicycle, and pedestrian facilities.

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AIR QUALITY CONTROL BOARD REPORT

Summary of Activities*
February 9, 2005 Meeting of the
Albuquerque/Bernalillo County
Air Quality Control Board

Members Present:

Dr. Betty Chang, Vice Chair

Dr. Johnnye Lewis

Dr. Donald Naranjo

Dr. Stephen Pilon

Ms. Karen Wentworth

Reports

Overview of the Air Quality Division website (www. cabq.gov/airquality). The newly refurbished website now includes a Stationary Source database with Geographic Information System (GIS) interface. Displayed on an electronic map are all stationary emissions sources located within Bernalillo County. By clicking on a source, the user is provided with information about that specific source such as ownership, emissions tonnages, etc.

Other website improvements include an electronic library containing copies of all active air quality regulations affecting Bernalillo County, various forms and policies used by Air Quality Division. The library also includes a catalog of past Air Notes as well as past issues of this newsletter.

Mr. Isreal Tavarez, Environmental Engineering Manager, briefed the Board on various issues related to air quality currently before the state legislature for consideration.

<u>Vehicle Pollution Management Division.</u> Mr. Glen Dennis, Vehicle Pollution Management Division manager, reported that the Oxygenated Fuels regulation and the Oxyfuels procedure manual are being revised. Proposed amendments include changes to the language regulating enforcement and compliance, as well as the procedures for oxygenate content testing. A hearing on the proposed changes has been tentatively scheduled for September 14, 2005.

Mr. Dennis also reported on the status of the BAR97 emissions analyzer. The Division has been working with the machine manufacturer, Worldwide Environmental, regarding alleged inconsistencies noted during quality assurance audits of the analyzer. Subsequent testing of the machines has demonstrated that the machines are well within established specifications and are functioning correctly.

Albuquerque / Bernalillo County Air Quality Control Board

Board Members & Staff
Stephen Pilon, City
Karen Wentworth, County
Johnnye Lewis - County
Sue Umshler - County (Chair)
Betty Chang - City (Vice Chair)
Donald Naranjo - City
Vacant - City

Martin J. Chávez, Mayor City of Albuquerque

Alfredo Santistevan, Director Environmental Health Department

Isreal L. Tavarez Environmental Engineering Manager/ Secretary to the Board

> Adelia Kearny Assistant City Attorney

Glen Dennis Vehicle Pollution Management Division Manager

Jens Deichmann Environmental Planning Commission Liaison

Monthly Board Meetings
Board meetings are usually held the second
Wednesday of each month at 5:15 p.m. in the
Council/Commission Chambers, lower level, Albuquerque/
Bernalillo County Government Center,
1 Civic Plaza, 400 Marquette Avenue NW
Albuquerque, NM.

Agendas, which will show the correct date and meeting place, are generally available three days before the meeting and can be obtained by contacting

Mr. Neal Butt at 505-768-2660

or via e-mail at: nbutt@cabq.gov.

Notice to persons with disabilities: If you have a disability and require special assistance to participate in any Board meeting please call the Air Quality Division at 505-768-2600 (Voice) or 505-768-2482 (TTY)

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Vehicle Pollution Management Division Report

VPMD is pleased to announce the promotion of Gilbert Espinosa from Environmental Health Specialist I to Specialist II. Mr. Espinosa has worked for the Division for almost ten years and previously served as the City's Fuel Coordinator and as an ASE Certified Master Technician. Gilbert's expertise in fuels, engine performance, emissions, and training and his ability to effectively convey that information to both industry and the public have made him an invaluable asset to the program.

As one of the duties in his new position, Mr. Espinosa has been assigned the task of conducting gas audits on the new BAR97 analyzers. Preliminary spot audits had suggested that the analyzers may have had a problem holding calibration. However, after consulting with experts from the Bureau of Automotive Repair (BAR) in California, VPMD upgraded its audit equipment and tightened its audit protocols with markedly improved and repeatable results. Gilbert has conducted gas audits on over 1/3 of our 125 analyzers and all have passed with room to spare.



California BAR has the most stringent audit standards in the nation as they require repair within one week for analyzers that deviate from the audit gas certification by more than 4% and immediately lock out analyzers that deviate by more than 7%. All of our local BAR97 analyzers tested have passed the 4% California standard with most being within 2% and many within 1% or less. By comparison the old BAR90 analyzers were allowed a deviation of plus or minus 6%.

VPMD hosted representatives from the Environment Department in Chihuahua Mexico. They were especially interested in the emission testing equipment and design of the test facility as they are set to embark on a pilot project for emission testing in Chihuahua. In addition to a tour of the facility, they were able to witness a two-speed exhaust test, gas cap test, an OBDII test, and an irate motorist who was advised that he had not met the minimum requirements for being granted a time extension for repair.

Jiffy Lube Inc. recently purchased Zip Lube Inc. including all eight Albuquerque area stores that conduct emission testing. VPMD has updated all the station certifications and emissions analyzers to reflect the change of ownership. Jiffy Lube is still in the process of changing some of the station signage but all of the former Zip Lubes have remained open and continue to offer emission testing services.

Air Care Inspector Training Program:

Nine of eleven prospective Air Care inspectors passed all aspects of the certification course in February and were issued certifications as Air Care Inspectors. Seven of nine students passed the course in March and will be certified.

Alternative Fuels Update:

VPMD finally received its new PetroSpec GS-1000 fuel analyzer in late February. The unit provides quick and accurate fuel analysis for content of seven different oxygenates including ethanol, MTBE, ETBE and TAME. The Division collected over 200 samples during the just completed oxyfuel season to meet the regulatory mandate of sampling at least 20% of retail fuel facilities. VPMD recently sent 75 split samples to the Petroleum Standard Bureau Lab for comparison with the results obtained on the new GS-1000 portable unit.

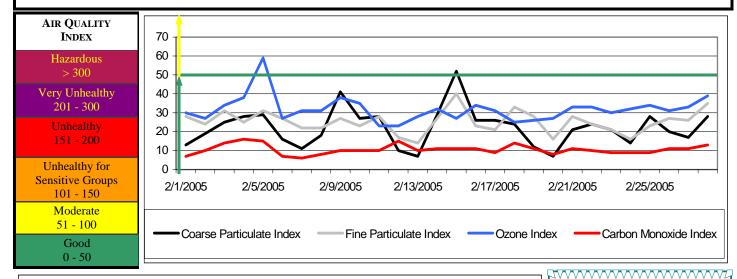


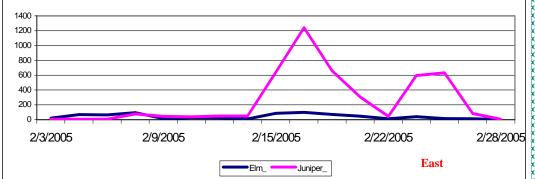
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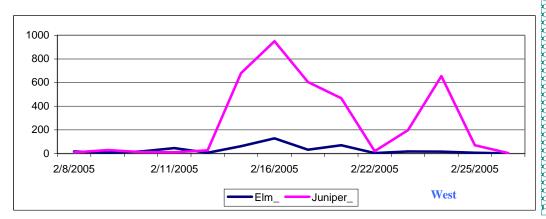
AIR QUALITY DATA FOR FEBRUARY, 2005

The Air Quality Index [AQI] values indicate how clean or polluted ambient air is, and if there are any health concerns associated with a specific value. The AQI in Bernalillo County is measured for four [4] nationally regulated air pollutants: Carbon Monoxide [CO], Ozone $[O_3]$, Coarse Particulate [PM10] and Fine Particulate [PM2.5].

As shown by the graph below, AQI values were "Good" to "Moderate" in February, which means that air pollutants at this level pose little or no health risks to our community, but those members of our community who already have respiratory problems may be slightly affected. Thus, as the values increase into a higher category, health risks will similarly increase. As you may have guessed, the last category, "Hazardous", with AQI values greater than 300, is very serious and can be detrimental to the health of the whole community even if emergency health warnings are triggered Call the Air Quality Information Line at 766-7664 or 768-4731 Option 1 to get today's AQI Values.







Pollen data is reported Monday - Friday, during the months of March - October. It is reported as grains of pollen per cubic meter of air sampled. Air Quality Monitoring staff collect data from areas east and west of the Rio Grande within the greater Albuquerque metropolitan area. Pollen data from a previous 24-hour sampling period is then published in local newspapers in the weather section, broadcast with local news station weather reports, or can be obtained by calling the

Air Quality Information Line

766-7664

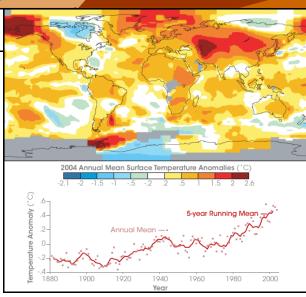
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Feeling a Little Warm?

While there is still much to learn about the complex mechanisms that govern climate on our little planet, it's becoming more and more difficult to dispute the reality of global warming. Study the map and graph on the right.

The graph shows global mean surface temperatures recorded since 1880, the earliest year that meteorological records are considered reliable. The trend is clear. 2004 goes on record as having been the fourth hottest year on record, with global average temperatures 0.48 degrees Celsius above the climatological average.

While short term fluctuations can be attributed to such anomalies as major volcanic eruptions (1963, 1982 and 1991) and El Niños (1998 stands out with one of the strongest El Niños on record), the long term trend is unmistakably upward.



Courtesy of NASA's Earth Observatory

The map shows how those average temperature changes have been distributed globally. Areas showing temperature increases above normal are depicted in reds and yellows. Areas with temperature decreases are shown in blue and areas with essentially no temperature change are shown as white. Areas showing the most dramatic temperature increases are Alaska, the Antarctic Peninsula, and Central Asia. While temperature deviations of fractions of a degree may seem insignificant, scientists are convinced that even small average temperature fluctuations could trigger significant changes in climate on a global scale.

Recent Ozone Loss Linked to Solar Storms

Amid recent claims that the stratospheric ozone hole might be shrinking comes news that suggests the case is yet far from resolved.

In the spring of 2004, stratospheric ozone over high northern latitudes declined by up to 60%, prompting officials to issue a health alert to residents of the far North. The sudden decline caught scientists off guard and at a loss to explain the abrupt shift. Scientists now suspect that the sudden loss of ozone might have been due to a rare combination of natural events.



An intense round of solar storms in the fall of 2003 caused massive streams of charged particles (ions) to be caught up in Earth's magnetic field. The rivers of particles triggered chemical reactions in the upper reaches of the stratosphere that increased the formation of extra nitrogen. Nitrogen is known to destroy ozone on contact but the nitrogen was formed well above Earth's ozone layer. It took some extreme earthly weather to bring the nitrogen and ozone together.

Winds in the upper atmosphere associated with a meteorological system called the polar stratospheric vortex increased to unprecedented speeds in February and March of 2004. The vortex develops as masses of cold air sink above the poles. The spinning vortex allowed nitrogen from high altitudes to sink to lower altitudes where it came in contact with ozone.

Scientists have long known of a thinning of the ozone layer (commonly referred to as an ozone hole) over the far southern hemisphere, thought to be caused by the release into the atmosphere of chlorofluorocarbons, chemicals used as refrigerants or propellants. But the sudden appearance of an ozone hole over the northern hemisphere came as somewhat of a surprise.

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First Hydrogen Hybrid

Mazda Motor Corporation has unveiled a the world's first hydrogen/gasoline hybrid. Mazda began road testing the rotary engine vehicle in Japan in October, 2004.

The hydrogen rotary engine features a dual fuel system that allows drivers to select hydrogen or gasoline at the flick of a switch. The system incorporates a 61-liter gasoline tank and a 74-liter, high-pressure (350 MPa) hydrogen tank, so drivers need not worry about running out of fuel in areas where hydrogen filling stations have yet to be constructed.

HYDROSEN (S)

where hydrogen filling stations have yet to be constructed. The body of the vehicle is based on the Mazda RX-8.

The road tests will provide Mazda with data for assessing the practicality of the vehicle, which it aims to start leasing to government agencies, municipalities and private companies within two years.

The hydrogen rotary engine exhibits superior environmental performance with zero carbon dioxide emissions and close to zero nitrogen oxide emissions while using hydrogen fuel. Also, because the vehicle can be produced using existing parts and production facilities, it can be put into practical use at low cost and with a high level of reliability. Mazda hopes to contribute to the realization of a hydrogen-powered society by developing this technology as a possible step toward the practical use of the hydrogen engine as an exceptionally clean internal combustion engine.



New Fugitive Dust Regulation Spawns Workshops



March 1, 2005 marked the first anniversary of Bernalillo County's new Fugitive Dust regulation. The new rules are intended not only to bring many new potential dust sources under regulation but also introduce new concepts and procedures to dust sources previously permitted under the old Airborne Particulate Matter regulation.

Dust permits have long been required for construction activities that involved full-depth, short-term soil disturbances for site grading, utility installation, foundations, etc. The new Fugitive Dust regulation still encompasses those activities but now also includes additional stipulations new to the construction industry.

The new Fugitive Dust regulation also includes provisions for Programmatic Permits. Programmatic Permits are intended for lands that undergo routine, ongoing operations that have the potential to release dust. Examples of properties that might call for Programmatic Permits would include salvage yards and equipment storage lots among others. While not involving total full-depth soil disturbances, these operations have long-term impacts that can generate dust as part of their daily activities.

To familiarize potential dust sources with their responsibilities under the new regulation, Air Quality Division conducted four "Dust Workshops" in February. Over 100 persons attended the four sessions from over 60 local businesses. Attendees were briefed on the new rules and familiarized with the new forms and applications necessary to comply. The workshop format allowed for lots of informal discussion.

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MAIL TO:

We'd Like To Hear From You With Comments On This Newsletter! Please Call The Education, Outreach & Technical Assistance Section At 768-1941.